



Maryland Weekly Influenza Surveillance Activity Report

A summary of influenza surveillance indicators reported to MDH for the week ending February 24, 2018

Prepared by the Infectious Disease Epidemiology and Outbreak Response Bureau
Prevention and Health Promotion Administration
Maryland Department of Health

The data presented in this document are provisional and subject to change as additional reports are received.

SUMMARY

During the week ending February 24, 2018, influenza-like illness (ILI) intensity in Maryland was **HIGH** and there was **WIDESPREAD** geographic activity. The proportion of outpatient visits for ILI reported by Sentinel Providers and by Maryland Emergency Departments decreased. The proportion of MRITS respondents reporting ILI decreased. Clinical laboratories reported a decrease in the proportion of specimens testing positive for influenza. Eighty-four specimens tested positive for influenza at the MDH lab. There were 253 influenza-associated hospitalizations. The cumulative season number of influenza-associated deaths among hospitalized adults was 46. Seven respiratory outbreaks were reported to MDH.

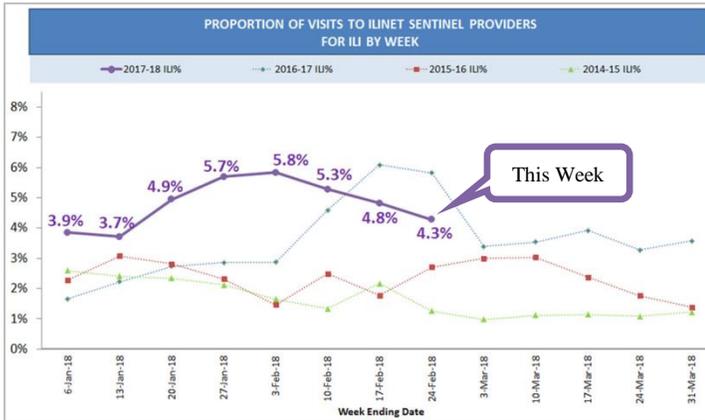
[Click here to visit our influenza surveillance web page](#)

ILI Intensity Levels
Minimal
Low
Moderate
✓ High

Influenza Geographic Activity
No Activity
Sporadic
Local
Regional
✓ Widespread

ILINet Sentinel Providers

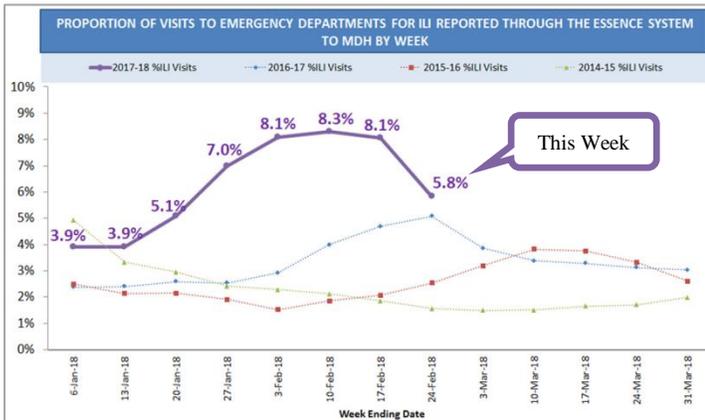
Twenty-five sentinel providers reported a total of 8,484 visits this week. Of those, 363 (4.3%) were visits for ILI. This is **above** the Maryland baseline of **2.0%**.



ILI Visits To Sentinel Providers By Age Group	This Week Number (%)	Last Week Number (%)	Season Number (%)
Age 0-4	78 (21%)	75 (20%)	990 (23%)
Age 5-24	157 (43%)	184 (48%)	1,705 (39%)
Age 25-49	69 (19%)	72 (19%)	921 (21%)
Age 50-64	42 (12%)	34 (9%)	477 (11%)
Age ≥ 65	17 (5%)	15 (4%)	227 (5%)
Total	363 (100%)	380 (100%)	4,320 (100%)

Visits to Emergency Departments for ILI

Emergency Departments in Maryland reported a total of 42,368 visits this week through the [ESSENCE surveillance system](#). Of those, 2,475 (5.8%) were visits for ILI.



ILI Visits To Emergency Departments By Age Group	This Week Number (%)	Last Week Number (%)	Season Number (%)
Age 0-4	465 (19%)	679 (17%)	8,366 (25%)
Age 5-24	759 (31%)	1,345 (34%)	9,543 (28%)
Age 25-49	642 (26%)	1,003 (26%)	8,640 (25%)
Age 50-64	358 (14%)	489 (12%)	4,229 (12%)
Age ≥ 65	251 (10%)	399 (10%)	3,343 (10%)
Total	2,475 (100%)	3,915 (100%)	34,121 (100%)

Neighboring states' influenza information:

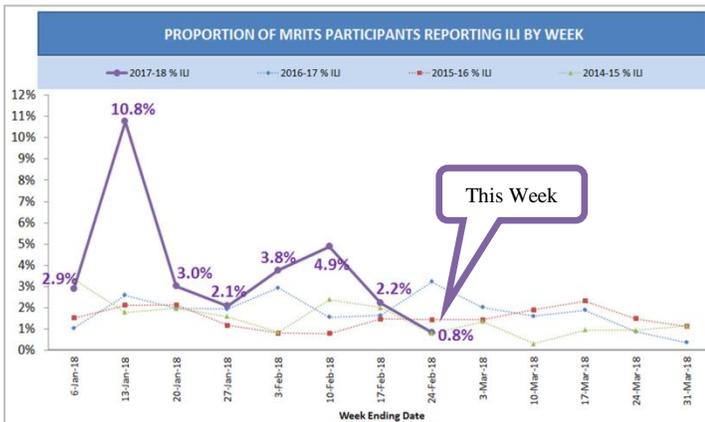
- Delaware <http://dhss.delaware.gov/dph/epi/influenzahome.html>
- District of Columbia <http://doh.dc.gov/service/influenza>
- Pennsylvania <http://www.health.pa.gov/My%20Health/Diseases%20and%20Conditions/I-L/Pages/Influenza.aspx#.V-LtaPkrJD8>
- Virginia <http://www.vdh.virginia.gov/epidemiology/influenza-flu-in-virginia/influenza-surveillance/>
- West Virginia <http://dhhr.wv.gov/oeps/disease/flu/Pages/fluSurveillance.aspx>

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Community-based Influenza Surveillance (MRITS)

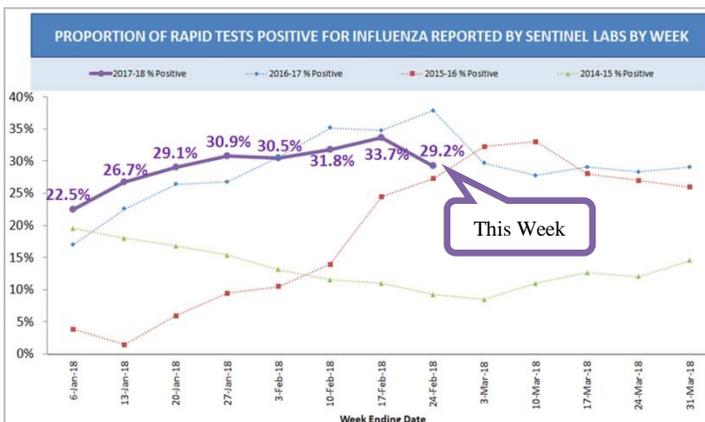
MRITS is the Maryland Resident Influenza Tracking System, a weekly survey for influenza-like illness (ILI). A total of 590 residents responded to the [MRITS survey](#) this week. Of those, 5 (0.8%) reported having ILI and missing greater than 21 cumulative days of regular daily activities.



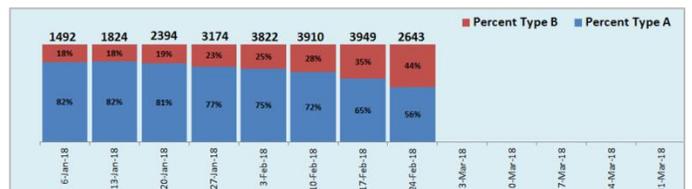
MRITS Respondents Reporting ILI By Age Group	This Week Number (%)	Last Week Number (%)	Season Number (%)
Age 0-4	--	1 (8%)	7 (3%)
Age 5-24	3 (60%)	4 (33%)	69 (31%)
Age 25-49	--	2 (17%)	44 (20%)
Age 50-64	1 (20%)	4 (33%)	76 (34%)
Age ≥ 65	1 (20%)	1 (8%)	26 (12%)
Total	5 (100%)	12 (100%)	222 (100%)

Clinical Laboratory Influenza Testing

There were 56 clinical laboratories reporting 9,038 influenza diagnostic tests, mostly rapid influenza diagnostic tests (RIDTs). Of those, 2,643 (29.2%) were positive for influenza. Of those testing positive, 1,492 (56%) were influenza Type A and 1,151 (44%) were influenza Type B. The [reliability of RIDTs](#) depends largely on the conditions under which they are used. False-positive (and true-negative) results are more likely to occur when the disease prevalence in the community is low, which is generally at the beginning and end of the influenza season and during the summer.

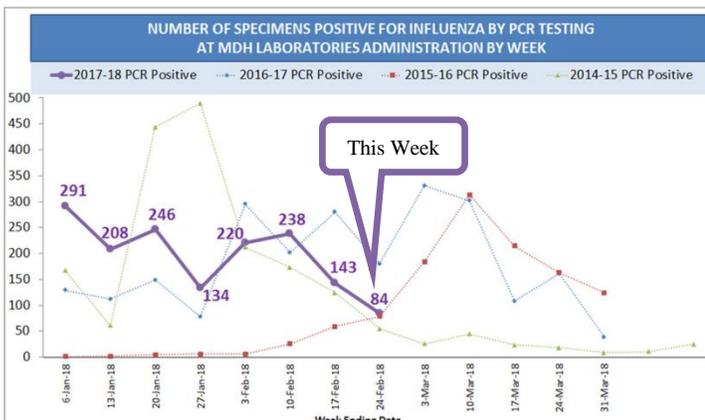


Positive Rapid Flu Tests by Type	This Week Number (%)	Last Week Number (%)	Season Number (%)
Type A	1,492 (56%)	2,564 (65%)	18,941 (73%)
Type B	1,151 (44%)	1,385 (35%)	6,857 (27%)
Total	2,643 (100%)	3,949 (100%)	25,798 (100%)



State Laboratories Administration Influenza Testing

The MDH Laboratories Administration performed a total of 178 PCR tests for influenza and 84 (47.2%) were positive for influenza. Of those testing positive, 14 (16.7%) were positive for Type A (H3), 11 (13.1%) were positive for Type A (H1), 54 (64.3%) were positive for Type B (Yamagata), 4 (4.8%) were positive for Type B (Victoria), and there was 1 (1.2%) that was positive for dual Type A (H1/H3). PCR testing is more reliable than RIDT. The MDH testing identifies subtypes of influenza A and lineages of influenza B, information that is not available from the RIDT results. The table below summarizes results by type, subtype, and lineage.



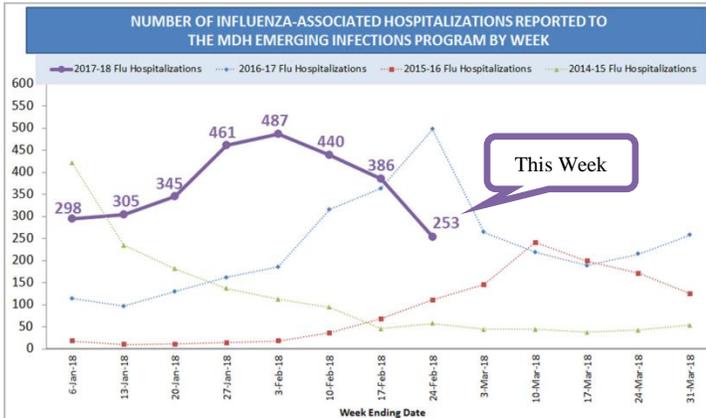
Positive PCR Tests by Type (Subtype)	This Week Number (%)	Last Week Number (%)	Season Number (%)
Type A (H1)	11 (13%)	16 (11%)	305 (17%)
Type A (H3)	14 (17%)	85 (59%)	1,259 (69%)
Type B (Victoria)	4 (5%)	4 (3%)	16 (1%)
Type B (Yamagata)	54 (64%)	38 (27%)	233 (13%)
Dual Type A (H1/H3)	1 (1%)	--	2 (<1%)
Dual Type A(H3)/B	--	--	2 (<1%)
Type A (H3N2v)	--	--	3 (<1%)
Total	84 (100%)	143 (100%)	1,820 (100%)

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Influenza-associated Hospitalizations

A total of 253 influenza-associated hospitalizations were reported this week. (A person with an overnight hospital stay along with a positive influenza test of any kind, e.g., RIDT or PCR, is considered an “influenza-associated hospitalization” for purposes of influenza surveillance.) This surveillance is conducted as a component of the Maryland Emerging Infections Program.



Influenza-Associated Hospitalizations by Age Group	This Week Number (%)	Last Week Number (%)	Season Number (%)
Age 0-4	11 (4%)	23 (6%)	227 (7%)
Age 5-17	23 (9%)	24 (6%)	164 (5%)
Age 18-24	7 (3%)	13 (3%)	94 (3%)
Age 25-49	31 (12%)	40 (10%)	424 (12%)
Age 50-64	45 (18%)	80 (21%)	732 (21%)
Age ≥ 65	136 (54%)	206 (53%)	1,842 (53%)
Total	253 (100%)	386 (100%)	3,483 (100%)

Influenza-associated Deaths

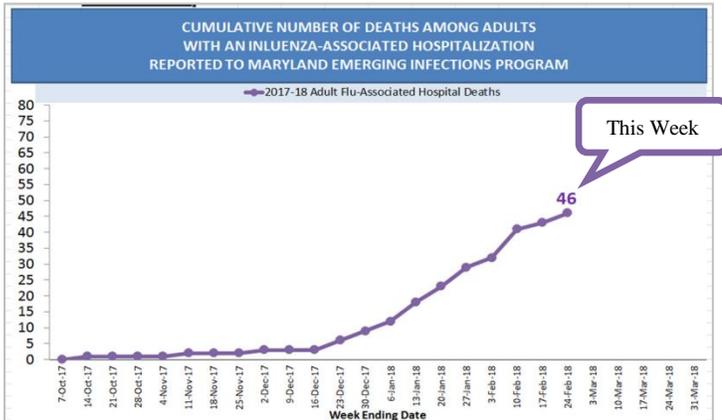
An influenza-associated death is one with a clinically compatible illness and a positive influenza test of any kind.

Pediatric Deaths: The total number of pediatric (< 18 years of age) deaths reported this influenza season is 1.

Influenza-associated pediatric mortality is a reportable condition in Maryland. Pediatric deaths are tracked without regard to hospitalization.

Adult Deaths Among Hospitalized Patients: A total of 46 deaths have been reported among adults admitted to Maryland hospitals this influenza season.

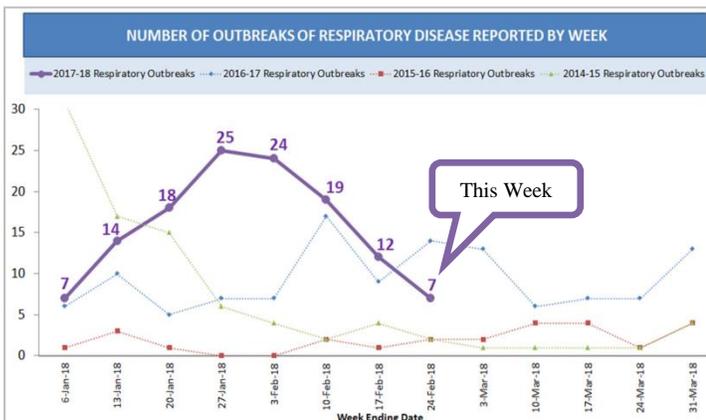
Influenza-associated adult mortality is *not* a reportable condition in Maryland. However, adult mortality surveillance is conducted as a component of the Maryland Emerging Infections Program’s influenza-associated hospitalization surveillance).



Influenza-Associated Deaths	Cumulative Season Total
Pediatric Deaths (Age < 18)	1
Adult Deaths (in hospitalized cases)	46

Outbreaks of Respiratory Disease

There were seven respiratory outbreaks reported to MDH this week. (Disease outbreaks of any kind are reportable in Maryland. Respiratory outbreaks may be reclassified once a causative agent is detected, e.g., from ILI to influenza.)



Respiratory Outbreaks by Type	This Week Number (%)	Last Week Number (%)	Season Number (%)
Influenza	7 (100%)	11 (92%)	114 (78%)
Influenza-like Illness	--	1 (8%)	22 (15%)
Pneumonia	--	--	10 (7%)
Other Respiratory	--	--	--
Total	7 (100%)	12 (100%)	146 (100%)

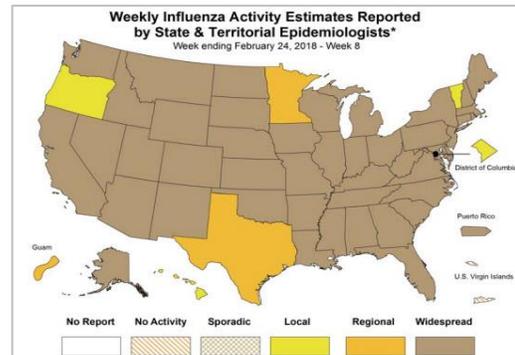
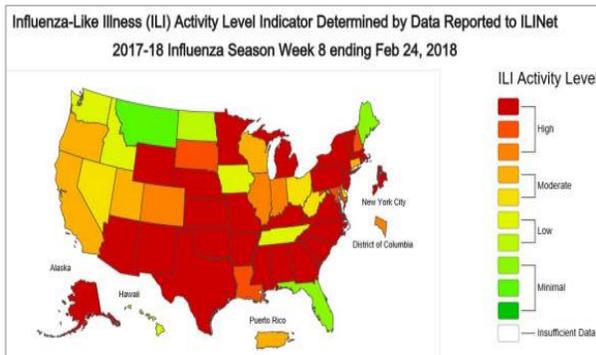
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National Influenza Surveillance (CDC)

During week 8 (February 18-24, 2018), influenza activity decreased in the United States.

- **Viral Surveillance:** While influenza A(H3) viruses continue to be predominant this season, during week 8 the overall proportion of influenza A viruses is declining and the proportion of influenza B viruses is increasing. The percentage of respiratory specimens testing positive for influenza in clinical laboratories decreased.
- **Pneumonia and Influenza Mortality:** The proportion of deaths attributed to pneumonia and influenza (P&I) was above the system-specific epidemic threshold in the National Center for Health Statistics (NCHS) Mortality Surveillance System.
- **Influenza-associated Pediatric Deaths:** Seventeen influenza-associated pediatric deaths were reported.
- **Influenza-associated Hospitalizations:** A cumulative rate of 81.7 laboratory-confirmed influenza-associated hospitalizations per 100,000 population was reported.
- **Outpatient Illness Surveillance:** The proportion of outpatient visits for influenza-like illness (ILI) was 5.0%, which is above the national baseline of 2.2%. All 10 regions reported ILI at or above region-specific baseline levels. New York City, the District of Columbia, and 32 states experienced high ILI activity; Puerto Rico and nine states experienced moderate ILI activity; six states experienced low ILI activity; and three states experienced minimal ILI activity.
- **Geographic Spread of Influenza:** The geographic spread of influenza in Puerto Rico and 45 states was reported as widespread; Guam and two states reported regional activity; the District of Columbia and three states reported local activity; and the U.S. Virgin Islands reported no activity.



Where to get an influenza vaccination

Interested in getting a flu vaccine for the 2017-18 influenza season? Go to <https://phpa.health.maryland.gov/influenza/Pages/getvaccinated.aspx> and click on your county/city of residence. You will be redirected to your local health department website for local information on where to get your flu vaccine.